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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,685	04/17/2001	Jefferson E. Odhner	LUC 2-026-3	7184

7590

09/16/2002

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT PAPER NUMBER

2872

DATE MAILED: 09/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

09/836,685

Applicant(s)

ODHNER ET AL.

Examiner

Arnel C. Lavarias

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 2,4-16,18-30 and 33-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,17,31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I in Paper No. 4 is acknowledged.
2. Claims 2, 4-16, 18-30, 33-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Priority

- ✓ 3. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)).

- ✓ 4. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. _____" should follow the filing date of the parent application. If a parent application has become

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abandoned, the expression “now abandoned” should follow the filing date of the parent application.

If the application is a utility or plant application filed on or after November 29, 2000, any claim for priority must be made during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2) and (a)(5). This time period is not extendable and a failure to submit the reference required by 35 U.S.C.

119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) a surcharge under 37 CFR 1.17(t), and (2) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional. The petition should be directed to the Office of Petitions, Box DAC, Assistant Commissioner for Patents, Washington, DC 20231.

Specification

5. The disclosure is objected to because of the following informalities:

✓ Page 2, line 13- “biconic” should read “biconical”

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- ✓ Page 3, line 4- “expense” should read “expensive”
 - ✓ Page 4, line 22- insert “is” after “Fig. 1”
 - ✓ Page 4, line 23- “lens” should read “lenses”
 - ✓ Page 5, line 13- delete “.” After “Fig. 1”
 - ✓ Page 7, Table 1- all instances of “W1”, “W2”, “W3”, “W4” should be replaced with
“ λ_1 ”, “ λ_2 ”, “ λ_2 ”, “ λ_4 ”, respectively.
 - ✓ Page 8, line 29- delete “.” after “longitude”
 - ✓ Page 10, line 21- spell out “PVDF”. The first instance of an abbreviation should be spelled out.
 - ✓ Page 12, lines 2, 5- “Fig. 1” should read “Fig. 7A”
 - ✓ Page 12, line 5- “211” should read “216”
 - ✓ Page 12, line 17- spell out “FRE”. The first instance of an abbreviation should be spelled out.
 - ✓ Page 12, line 21- “know” should read “known”
- Appropriate correction is required.

Claim Objections

6. ✓ Claims 1 and 3 are objected to because of the following informalities:

Claim 1, line 3- ‘signals(s)’ should read ‘signal(s)’.

Claim 3 is dependent on Claim 1, and therefore inherits the deficiencies of Claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1, 3, 17, 31, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Bernstein.

Bernstein discloses a system and method for treating optical signals from a source (See Figures 1, 7A and 7B), comprising a source carrying input optical signals (See optical fibers on left hand side of Figure 7B and 711), each of said signals being associated with a particular wavelength, a movable diffractive optical element (See 3A of Figure 1; col. 6, lines 17-31) positioned to intercept said input optical signals for generating and distributing output optical signals, and output stations positioned to receive said output optical signals from the movable diffractive optical element (See optical fibers on right hand side of Figure 7B and 712). Bernstein additionally discloses that the movable diffractive optical element has a magnet (See for example Figures 4A-4D) having a holographic diffraction grating (See 3A of Figure 1; col. 6, lines 17-31) attached thereto, and being magnetically coupled to a coil (See col. 14, lines 12-20) energizable for movement of the magnet and the diffraction grating.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3, 17, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kompfner in view of Odhner et al.

Kompfner discloses a system and method for treating optical signals from a source (See Figures 2, 3A and 3B), comprising a source carrying input optical signals (See optical fibers 112 in Figure 2), each of said signals being associated with a particular wavelength, a diffractive optical element (See 20 of Figure 2) positioned to intercept said input optical signals for generating and distributing output optical signals, and output stations positioned to receive said output optical signals from the movable diffractive optical element (See optical fibers 113 in Figure 2). Kompfner lacks the diffractive optical element having a magnet and the diffractive optical element being a movable holographic diffraction grating attached to the magnet and being magnetically coupled to a coil energizable for movement of the magnet and the diffraction grating. However, Odhner et al. teaches a method and apparatus for moving a diffractive optical element (See for example Figures 17-19), comprising a magnet (See for example 140 and 142 of Figure 17) having a holographic diffraction element (See 132 in Figure 17) attached thereto, and being magnetically coupled to a coil (See 146 in Figure 17) energizable or movement of the magnet and diffraction grating. Therefore, it would have been obvious

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to one having ordinary skill in the art at the time the invention was made to incorporate a magnetically movable diffractive optical element, as taught by Odhner et al., in the system and method for treating optical signals from a source, as disclosed by Kompfner. One would have been motivated to do this to utilize fewer moving parts, thus decreasing system complexity and cost.

Conclusion

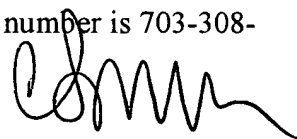
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Arnel C. Lavarias
September 11, 2002



Cassandra Spyrou
Supervisory Patent Examiner
Technology Center 2800